

Applicant: Keizo Takechi, et al.

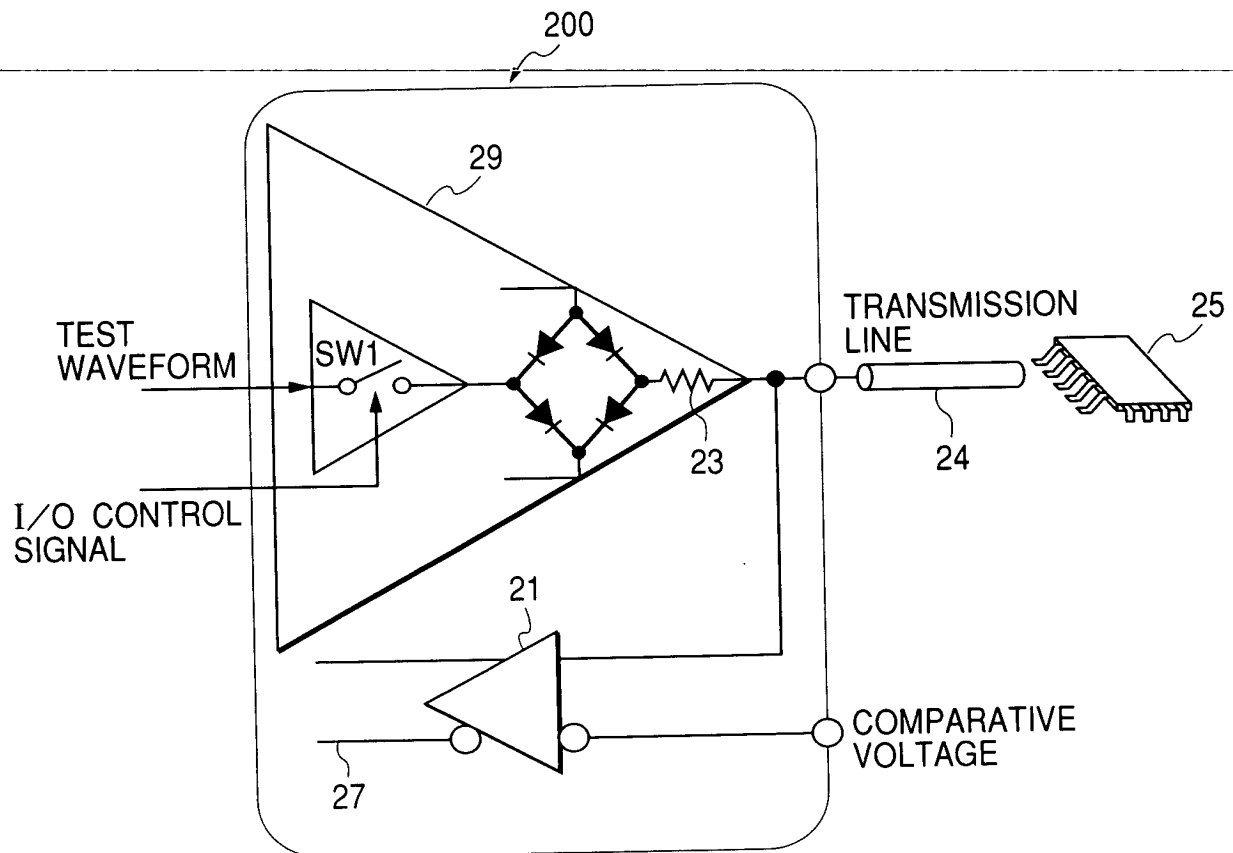
Title: Power Circuit Integrated with Load Current Output Control Pin...

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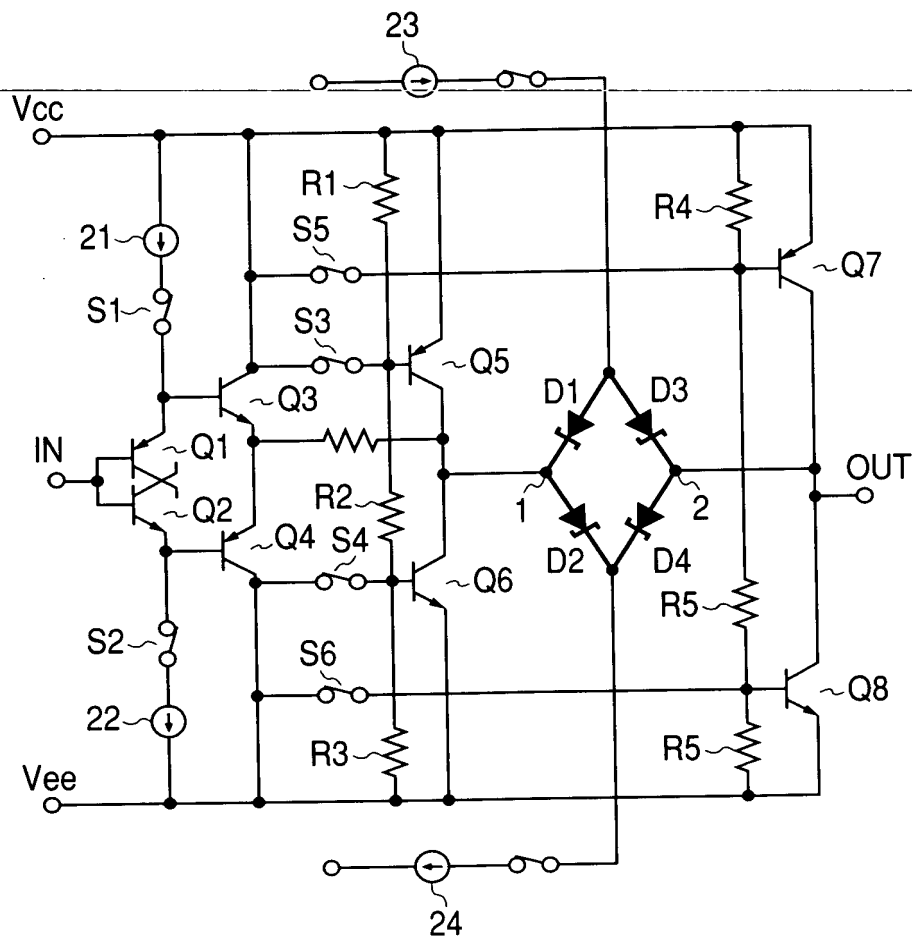
FIG. 1



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FIG. 2



10032751.122704

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FIG. 3A

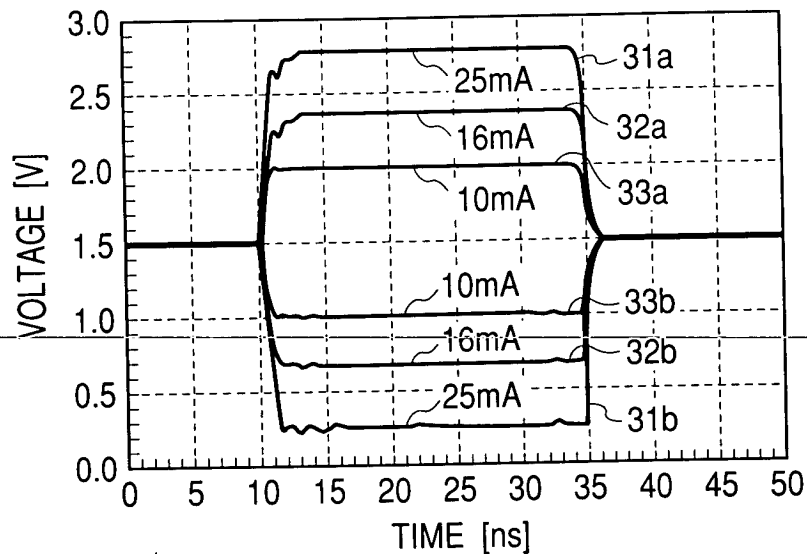
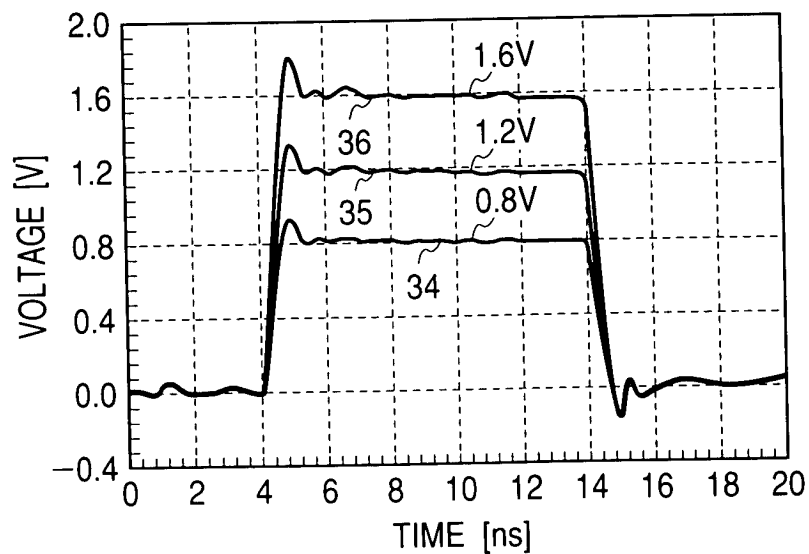


FIG. 3B



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Driver Circuit Integrated with Load Current Output Unit, Pin...

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FIG. 4A

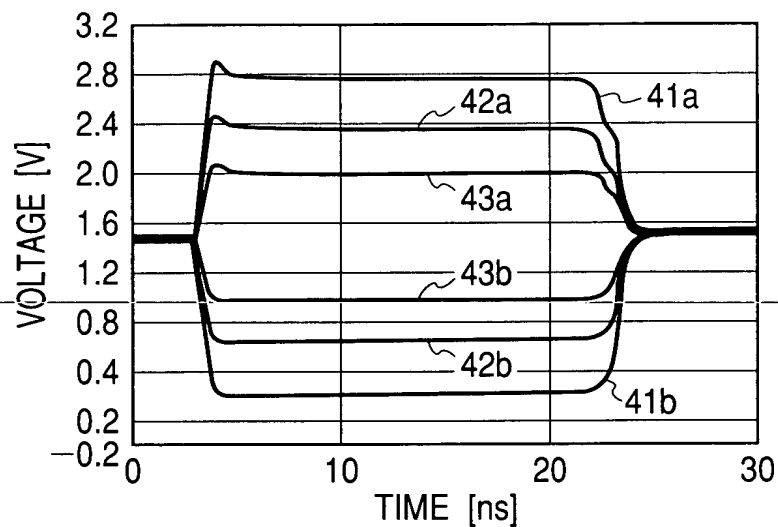


FIG. 4B

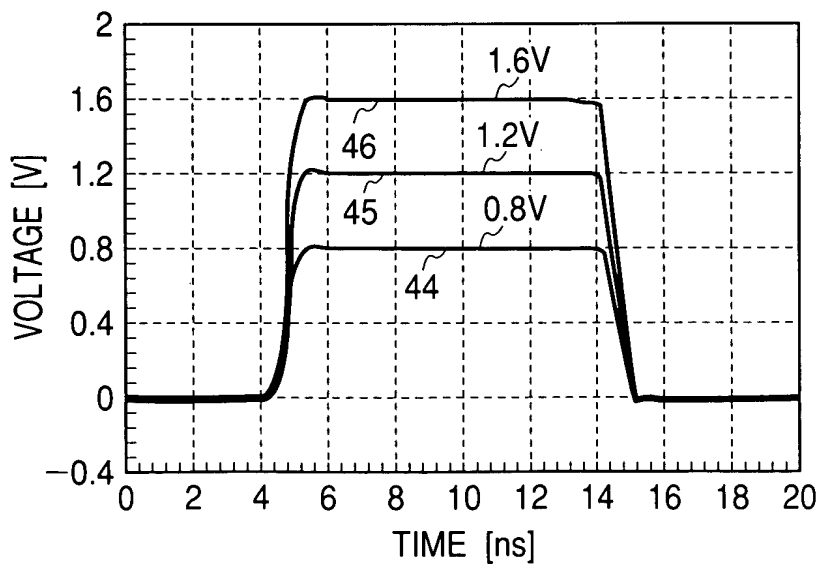
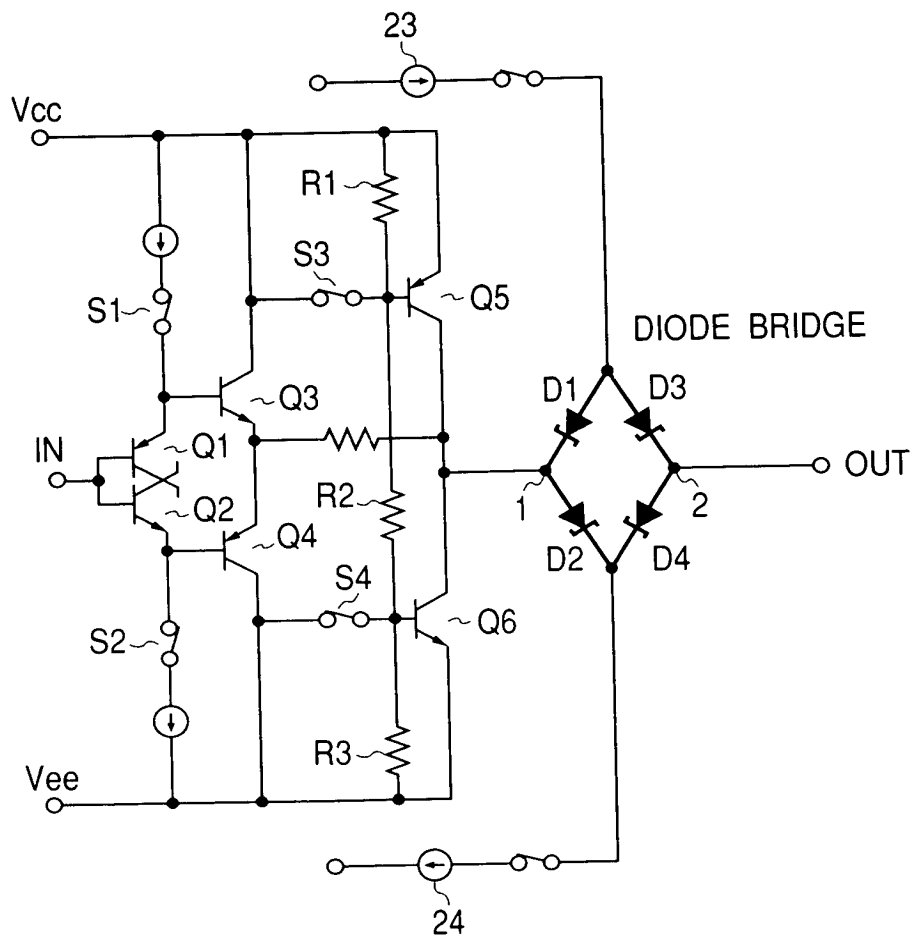


FIG. 5

ITEMS	INTEGRAL-TYPE DRIVER	CONVENTIONAL	
		DRIVER	DYNAMIC LOAD
ELECTRICITY CONSUMPTION	4.5W	3.6W 7.1W	3.5W
CHIP AREA [mm ²]	4.0×4.0 =16.0	3.7×3.7 =22.69	3.0×3.0
MOUNTING AREA [mm ²]	460	690	

FIG. 6



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Test Driver Circuit Integrated with Load Current Output

Pin...

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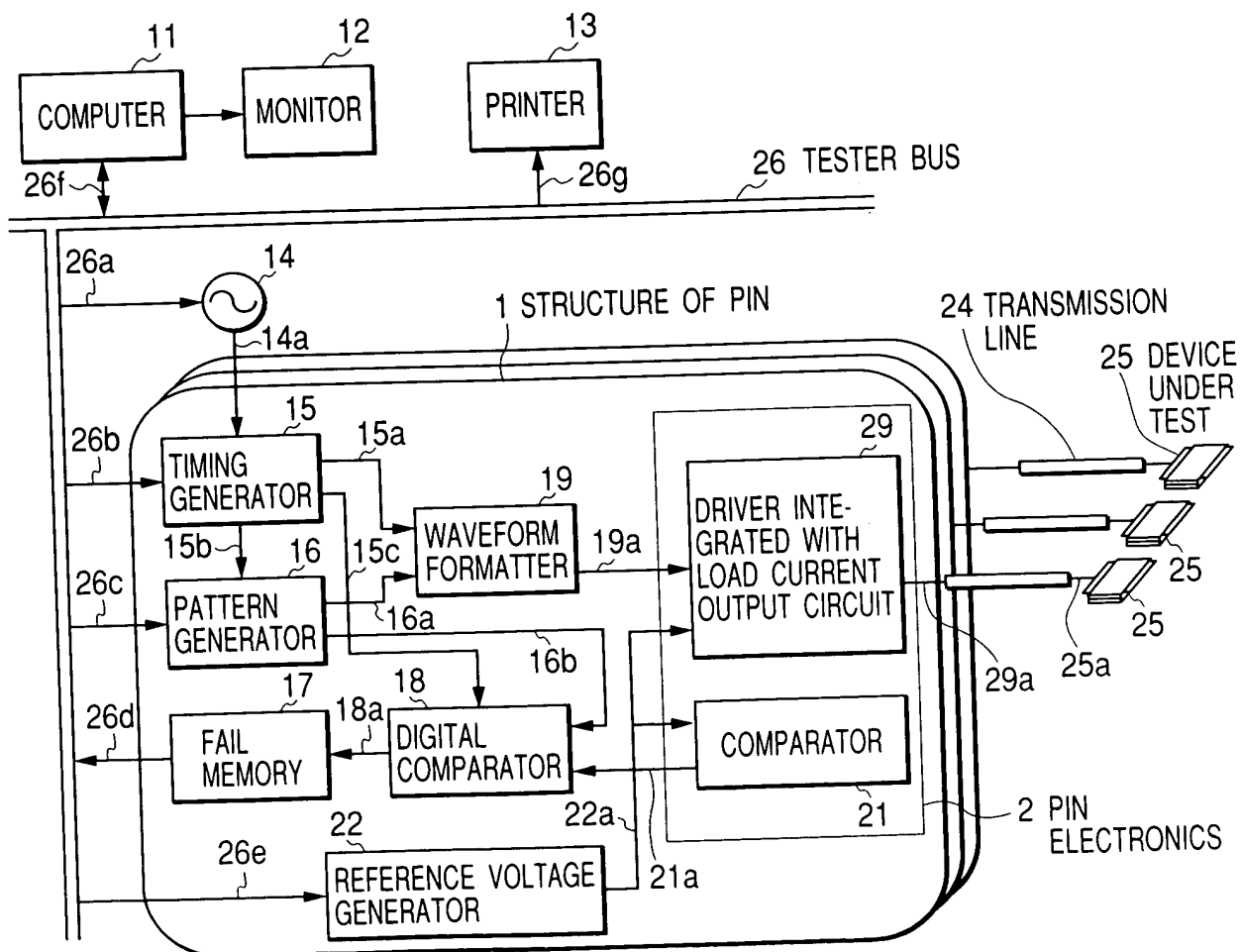
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FIG. 7

ITEMS	CIRCUIT SYSTEM OF FIG. 2	CIRCUIT SYSTEM OF FIG. 3
ELECTRICITY CONSUMPTION	700mW	1500mW
CHIP AREA [mm ²]	0.7 (CONVENTIONALLY 1.0)	0.7 (CONVENTIONALLY 1.0)
RISING TIME (1.6V)	200ps	300ps

FIG. 8



10032761.122701

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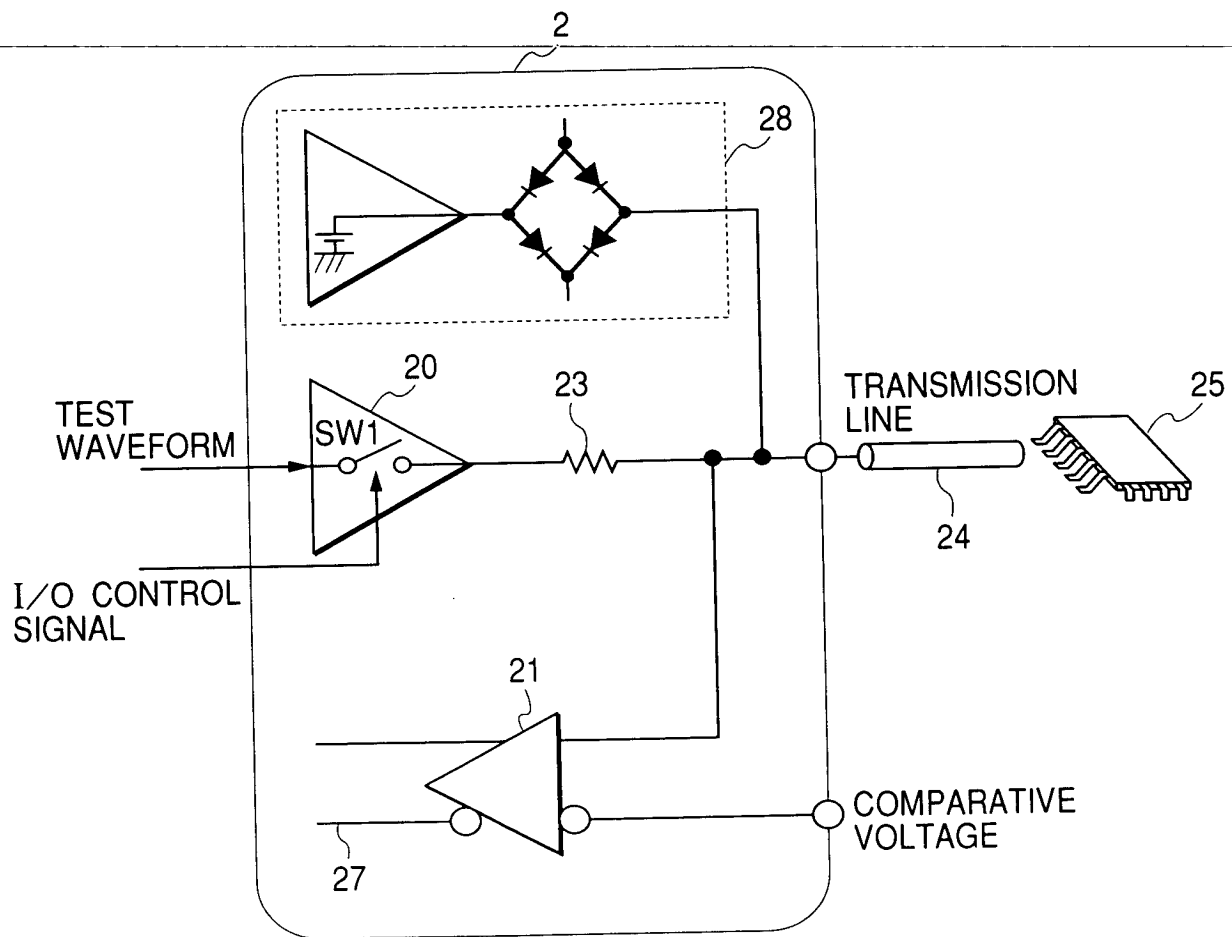
Transmitter Driver Circuit Integrated with Load Current Output

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FIG. 9 PRIOR ART



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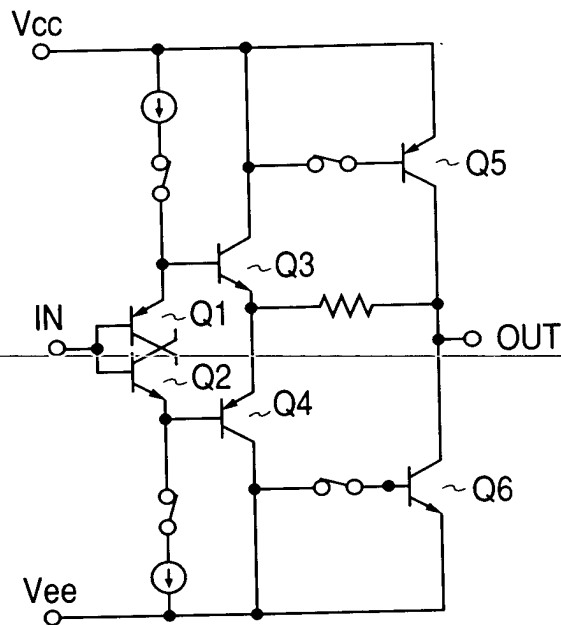
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Driver Circuit Integrated with Load Current Output Unit, Pin...

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FIG. 10
PRIOR ART**FIG. 11**
PRIOR ART